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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/826,687

04/16/2004

David Leon

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EXAMINER

ALAM, UZMA

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/826,687	<b>Applicant(s)</b> LEON ET AL.	
	<b>Examiner</b> UZMA ALAM	<b>Art Unit</b> 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/19/08.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/5/08</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This action is responsive to the request for continued examination filed February 19, 2008. Claims 1, 11, 21 and 26 and 33 are amended. Claims 1-36 are pending. Claims 1-36 represent a method for adaptively adjusting rate in a stream network.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Ravi et al. US Patent No. 6,292,834. Ravi et al. teaches transmitting streams over a multimedia network (see abstract).

As per claim 1, Ravi teaches a method comprising:

defining in a client in a multimedia streaming network (network 290) at least one parameter (performance variable 410) for determining a rate adaptation operating range (range of bit rate values; column 7, lines 13-15), wherein the streaming network comprises a server configured for providing streaming data to the client, the client having a receiver buffer (playout buffer 366) for storing at least part of the streaming data to the client, the client having a receiver buffer for storing at least part of the streaming data to compensate for a difference between data

Art Unit: 2157

transmission amount by the server and usage amount of the streaming data by the client so as to allow the client to have sufficient amount of streaming data to play out in a non-disruptive manner, and wherein the rate adaption operating range is used for rate adaptation between the server and the client (column 6, lines 31-60; column 7, lines 1-25);

providing to the server information indicative of said at least one parameter (play time and delta play time Figure 7A 710, 730; column 8, lines 26-35);

adapting in the server the data amount to a reception rate based on said at least one parameter (increase or decrease bandwidth based on performance variables; column 7, lines 16-25); and

adjusting in the client packet transfer delay variation based on said adapting (adjust threshold based on sampling; column 7, lines 35-60).

As per claim 2, Ravi teaches the method of claim 1, wherein said at least one parameter comprises a minimum shift amount indicative of a difference between a sampling time and a transmission time of a packet at the server so as to allow the server to carry out said adapting based on the minimum shift amount (decrease bandwidth threshold 512; column 7, lines 35-45).

As per claim 3, Ravi teaches the method of claim 1, wherein said at least one parameter comprises a target shift amount indicative of a shift amount greater than a difference between a sampling time and a transmission time of a packet at the server so as to allow the server to carry out said adapting based on the target shift amount (delta playtime and shift amount; column 8,

lines 36-65).

As per claim 4, Ravi teaches the method of claim 1, wherein said at least one parameter comprises a number specifying a maximum difference between the number of bytes that has been sent and the number of bytes that have been sampled so as to allow the server to carry out said adapting based on the number (upper bandwidth threshold; column 8, lines 1-35).

As per claim 5, Ravi teaches the method of claim 1, further comprising the step of adapting a sampling rate to the transmission rate in the server based on said at least one parameter (performance variables; column 7, lines 26-34).

As per claim 6, Ravi teaches the method of claim 1, wherein said at least one parameter comprises a clock shift amount for preventing playout disruption in the client (avoiding jitter; column 10, lines 20-32).

As per claim 7, Ravi teaches the method of claim 1, wherein said adapting comprises an adjustment of a transmission rate (adjusting bandwidth; column 7, lines 35-60).

As per claim 8, Ravi teaches the method of claim 1, wherein said adapting comprises an adjustment of a sampling rate (computing and adjusting playtime; column 8, lines 26-45).

Art Unit: 2157

As per claim 9, Ravi teaches the method of claim 1, wherein said adapting comprises an adjustment of Ravith a transmission rate and a sampling rate (column 7, lines 35-60; column 8, lines 26-45).

As per claim 10, Ravi teaches the method of claim 1, wherein said at least one parameter comprises:

a minimum shift amount indicative of a difference between a sampling time and a transmission time of a packet at the server (column 8, lines 50-60);

a target shift amount indicative of a shift amount greater than a difference between a sampling time and a transmission time of a packet at the server (column 8, lines 56-67);

a number specifying a maximum difference between the number of bytes that has been sent and the number of bytes that have been sampled (column 7, lines 60-67); and

a clock shift amount, and wherein two or more of the minimum shift amount, the target shift amount, the specifying number and the clock are sent together to the server (column 8, lines 1-25).

Claims 11-20, 21-25, 26-31 and 32-36 are rejected under the same rationale as claims 1-10 because they disclose a system, software code, terminal and network element employing the method of claims 1-10.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to UZMA ALAM whose telephone number is (571)272-3995. The examiner can normally be reached on Mondays and Tuesdays 5:30 - 2.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Uzma Alam  
Ua  
May 19, 2008

/Ario Etienne/  
Supervisory Patent Examiner, Art Unit 2157